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RPPR Final Report as of 18-Oct-2018

Agency Code:

Proposal Number: 72341EGCF

Agreement Number: W911NF-18-1-0021

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Report Date: 06-Sep-2018

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Final Report for Period Beginning 07-Dec-2017 and Ending 06-Jun-2018

Title: Advances and Upcoming Research Strategies in Reactive Materials, Fall 2017 MRS

Begin Performance Period: 07-Dec-2017

End Performance Period: 06-Jun-2018

Report Term: 0-Other

Submitted By: Steven Son

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Distribution Statement: 1-Approved for public release; distribution is unlimited.

STEM Degrees: 0

STEM Participants: 0

Major Goals: The goal of this funding was to provide registration and/or travel support of students, organizers, and invited speakers attending session PM2: Advances and Upcoming Research Strategies in Reactive Materials, at the Fall 2017 MRS Meeting. The focus of this conference was on current basic research in the broad field of energetic materials and covers topics ranging from molecular level modeling of energetic materials to the measurement of their behavior in propellants, explosives and pyrotechnics. This area is particularly relevant to the research objectives in energetic materials supported by ARO. The objective of the conference was to bring together leading scientists from the international community, as well as young researchers and students. This helps to build a network of scientists who can benefit from exposure to a wide range of subjects, all encompassed by this multi-disciplinary field. The discussion leaders and speakers were chosen to cover many technical areas within energetic materials, and to include established leaders as well as emerging contributors to the field who have already demonstrated their excellence.

Accomplishments: The MRS Meeting Symposium PM2, Advances and Upcoming Research Strategies in Reactive Materials was held and was very successful. Of the \$11K ARO Award, \$2412.51 should have been returned to ARO. The remaining funds used partially supported 22 students to attend. The funds also partially supported 8 Invited Speakers and Chairs to attend.

The location of this conference will be at the Hynes Convention Center and Sheraton Boston Hotel in Boston, MA. The standard conference registration fee is approximately \$665, or \$150 for students. The Materials Research Society provides equipped meeting, poster rooms, and audiovisual support. The conference site is accessible for people with disabilities.

The annual Fall MRS Meeting features over 50 symposia, and is attended by as many as 6,000 researchers. It is the preeminent event for those in the field of materials research. Sessions dedicated to energetic materials research have been held at the Fall MRS Meeting in 2011, 2012, 2014, and have received excellent attendance, at times exceeding room capacity. Over the years this meeting has been one in which the latest ideas in the area of energetics have been presented. The recurring themes in past years were related to the synthesis of new materials, particularly relating to the introduction of nanoparticles or nanoscale features, the modeling of reactions in energetic materials, and diagnostics suitable for the very short timescales and violent environments involved with energetics. In the more recent past new manufacturing techniques were used to control architecture, stoichiometry, or reactant spacing allowing for new ways to tune energetic material reactivity. In 2017 the program includes many new participants both from Europe and from the US, thus continuing to draw from the best the world has to offer in this field.

RPPR Final Report

as of 18-Oct-2018

Training Opportunities: The funds used partially supported 22 students to attend the 2017 Materials Research Society (MRS) Fall Meeting: Symposium PM2, Advances and Upcoming Research Strategies in Reactive Materials. This contributed to their education and training.

Results Dissemination: Nothing to Report

Honors and Awards: Nothing to Report

Protocol Activity Status:

Technology Transfer: Nothing to Report

PARTICIPANTS:

Participant Type: PD/PI

Participant: Steven Forrest Son

Person Months Worked: 1.00

Project Contribution:

International Collaboration:

International Travel:

National Academy Member: N

Other Collaborators:

Funding Support:

Grant Proposal

2017 Materials Research Society (MRS) Fall Meeting: Symposium PM2, Advances and
Upcoming Research Strategies in Reactive Materials.

November 26-December 1, 2017

Boston, MA, USA

W911NF1810021

Administrative Organization – Materials Research Society: 506 Keystone Drive /
Warrendale, PA 15086-7537

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Title of proposal: Advances and Upcoming Research Strategies in Reactive Materials,
Fall 2017 MRS.

Submitted to the Army Research Office

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Summary

The MRS Meeting Symposium PM2, Advances and Upcoming Research Strategies in Reactive Materials was held and was very successful. Of the \$11K ARO Award, \$2412.51 should have been returned to ARO. The remaining funds used partially supported 22 students to attend. The funds also partially supported 8 Invited Speakers and Chairs to attend.

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